

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A system for capturing an image by an optical detector, said system comprising:

an illumination system to illuminate a scan region, wherein the illumination system includes a bulb that emits light of greater intensity near its extremities than at its center, and wherein the illumination system comprises an incandescent bulb; and

an optical reduction component to reduce image light for receipt by said optical detector.

2. (Original) The system of claim 1 wherein the diameter of the bulb near its ends is wider than the diameter of the bulb at its center.

3. (Original) The system of claim 1 wherein the diameter of the bulb increases gradually moving away from the bulb's center and wherein the diameter of the bulb increases more rapidly near the bulb's ends.

4. (Original) The system of claim 3 wherein the system is a device selected from the list of:

scanner;

copier; and

fax.

5. (Cancelled)

6. (Cancelled)

7. (Currently Amended) A method of producing a digitized image comprising the steps of:

illuminating a scan region utilizing a bulb that emits light of greater intensity near its extremities than at its center, wherein the bulb is an incandescent bulb;

reducing image light received from the scan region for capture by an optical detector; and

capturing image light with the optical detector to produce the digitized image.

8. (Original) The method of claim 7 wherein the diameter of the bulb near its ends is wider than the diameter of the bulb at its center.

9. (Original) The method of claim 7 wherein the diameter of the bulb increases gradually moving away from the bulb's center and wherein the diameter of the bulb increases more rapidly near the bulb's ends.

10. (Original) The method of claim 9 wherein the method is implemented by a device selected from the list of:

scanner;
copier; and
fax.

11. (Cancelled)

12. (Cancelled)

13. (Currently Amended) A system for producing a digitized image comprising the steps of:

means for illuminating a scan region utilizing a bulb that emits light of greater intensity near its extremities than at its center, wherein the bulb is an incandescent bulb;
means for reducing image light received from the scan region for capturing; and
means for capturing image light to produce the digitized image.

14. (Original) The system of claim 13 wherein the diameter of the bulb near its ends is wider than the diameter of the bulb at its center.

15. (Original) The system of claim 13 wherein the diameter of the bulb increases gradually moving away from the bulb's center and wherein the diameter of the bulb increases more rapidly near the bulb's ends.

16. (Original) The system of claim 15 wherein the system is a device selected from the list of:

scanner;
copier; and
fax.

17. (Cancelled)

18. (Cancelled)

19. (Original) The system of claim 15 wherein the means for capturing is a charge-coupled device (CCD).

20. (Currently Amended) A bulb for providing light, said bulb comprising: a central portion that emits light of lesser intensity than distal portions, wherein said bulb possesses a greater density of phosphorescent material at distal portions of said bulb than at said central portion.

21. (New) A system for capturing an image by an optical detector, said system comprising:

an illumination system to illuminate a scan region, wherein the illumination system includes a bulb that emits light of greater intensity near its extremities than at its center, and wherein the illumination system comprises a bulb that possesses a greater density of phosphorescent material at distal portions of said bulb than at a central portion of said bulb; and

an optical reduction component to reduce image light for receipt by said optical detector.

22. (New) The system of claim 21 wherein the diameter of the bulb near its ends is wider than the diameter of the bulb at its center.

23. (New) The system of claim 21 wherein the diameter of the bulb increases gradually moving away from the bulb's center and wherein the diameter of the bulb increases more rapidly near the bulb's ends.

24. (New) The system of claim 21 wherein the system is a device selected from the list of:

scanner;
copier; and
fax.